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ABSTRACT

Leadership characteristics and effectiveness of male and female coaches of high school basketball teams were examined. Eighty-nine varsity basketball coaches were measured by means of established instruments to determine leadership style and behaviors. Five to 12 players from each team also completed a questionnaire concerning coaching behaviors. Career and seasonal winning percentages were used as measures of team effectiveness. One-way analysis of variance procedures were used to compare leadership characteristics of male and female coaches. Multiple regression procedures were employed to examine the relationships between various leader characteristics and effectiveness of teams coached by males and females. Results indicated that male and female coaches display significantly different leader characteristics. However, teams coached by male and female coaches are equally effective in terms of win-loss records. Six tables are included to demonstrate study results. (Author/JMK)

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Comparisons of Leader Style, Behaviors and Effectiveness
of Male and Female Coaches

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Running head: Coach Comparisons

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Abstract

This investigation examined leadership characteristics and effectiveness of male and female coaches of high school basketball teams. Eighty-nine varsity basketball coaches were measured by means of established instruments to determine leadership style and behaviors. Five to twelve players from each team also completed the questionnaire concerning coaching behaviors. Career and seasonal winning percentages were used as measures of team effectiveness. One-way analysis of variance procedures were used to compare leadership characteristics of male and female coaches. Multiple regression procedures were employed to examine the relationships between various leader characteristics and team effectiveness of teams coached by males and females respectively. Results indicated that male and female coaches display significantly different leader characteristics. However, teams coached by male and female coaches are equally effective in terms of win-loss records.

Key words: leadership, sex roles, sex differences, coaching behaviors

Coach Comparisons

Comparisons of Leader Style, Behaviors and Effectiveness of Male and Female Coaches

Since Title IX of the Education Amendments Act of 1972 was implemented in 1975 the growth of athletic participation and competition by females has been unprecedented. Administrators and policy-makers have recognized the need to provide resources to improve the number and quality of athletic opportunities for females at all levels of participation. Accompanying this expansion has been an increasing number of males coaching the female athletes and teams. At the college level, the incidence of male head coaches increased more than 100 percent since 1974, while women head coaches decreased during the same period. At the high school level similar changes have occurred in response to a more than six-fold increase in female participation. Certain administrative and organizational factors play a significant part in explaining these increases, for example, greater equity in coaching stipends for coaches of male and female teams. In addition, the demand for qualified coaches exceeds the supply in many areas. However, little systematic investigation of the coaching styles, behaviors and beliefs of the coaches of female teams has been undertaken. Specifically, are stereotypic role

definitions accurate for coaches generally, and are practices which have been effective for coaching males equally effective for females?

Previous descriptive research as well as prevailing stereotypes suggest that socialization patterns encourage and develop leadership functions in males to a greater extent than in females (Walum, 1977; Maccoby & Jacklin, 1974). Social-psychological descriptions of leaders in management settings have been highly correlated with similar descriptions of males generally, but not correlated with comparable descriptions of females generally (Schein, 1973; Bardwick, 1971). Most of the theoretical models of leadership have been tested in settings with male leaders and male or mixed-sex groups.

Sport and coaching have been stereotypically defined as male endeavors. Sport leaders and coaches are popularly described as gruff, authoritarian, male taskmasters concerned with winning ball games. While the coach is highly accountable, little specific reliable information is available about how coaches do or should go about winning games. Coaches have often been credited with "making men out of boys." The question now may be will these approaches also make "women out of girls"?

These traditional assumptions about leadership generally and

coaching particularly raise several questions: What do coaches do? Do males and females coach in similar ways? Does the sex of the players influence coach behaviors? For example, do men coach boys differently than girls? Are men more successful coaches than women?

Early attempts to explain leader effectiveness in terms of traits of the leader were not fruitful, but led the way to examining behaviors of leaders in relation to various situational factors. These contingency or situational models of leadership served as the basis for this investigation. Fiedler (1967, 1973) and House (1971) have suggested that leader management of contingencies such as task structure, group atmosphere, leader power, and follower satisfaction determine the effectiveness of the group and the leader. House emphasized the leader behaviors used in contingency management, and Fiedler maintained that such behaviors were important but limited by the motivational structure of the leader. This structure he referred to as leader style. These models have predicted that in certain situations task-oriented leaders would be more effective, while in others relations-oriented leaders would be more effective. Fiedler (1967) classified the favorability of situations based on 1) interpersonal relations of the group members, 2) task-structure,

and 3) power of the leader. This provides eight ideal types of situation ranging from a highly favorable one with positive group relations, high task structure and high power to a highly unfavorable one with poor group relations, low task structure and low leader power. Extensive research has been undertaken in military and industrial settings indicating that in highly favorable situations or highly unfavorable situations, task-oriented leaders and leader behaviors were more effective, while in situations of moderate favorability interpersonal relations-oriented leaders and consideration behaviors were associated with greater effectiveness. Application of Fiedler's model to a sport setting such as a basketball team would suggest a somewhat consistent situation favorability. Typically, basketball will represent high task structure, high leader power and primarily positive group relations; hence a situation of high favorability.

In a sport setting Bird (1977) found that highly skilled players perceived coaches as task-oriented if the teams were unsuccessful but relations-oriented if teams were successful, while low-skilled players' perceptions were the converse, task-oriented if the team was successful and relations-oriented if the team was not successful. Success in these studies is determined by win-loss records. This study did not compare player ratings

to coach scores of leader style.

Little research has addressed sex differences in leader style or behavior. Chapman (1975) indicated no differences in leader style of males and females, but suggested that differences in behavior which exist might be due to differential socialization and compliance with societal norms. Keane and Cheffers (1978) also found more differences in style within sexes than between sexes in a group of only ten coaches. Bird (1977) and VanderVelden (1971) reported generally relations-oriented styles for coaches, while Keane and Cheffers found the coaches in their study more task-oriented. Tharp and Gallimore (1976) in an in-depth analysis of John Wooten identified 10 categories of behavior consistently used by this very effective coach. 50.3% of all recorded behaviors were "directing" behaviors. There was little to support the stereotypically described controlling behaviors.

The final concern in competitive sport settings is to maximize the opportunity for success in a competitive situation. Coaches would like to know which leader behaviors consistently are associated with group success. In the context of this investigation an additional question was: is a female team coached by a male or female more successful? There is no research directly addressing the issue of sex of coach in relation

to team success, but research on experimenter bias (Rosenthal, 1966; Singer, 1973; Stevenson, 1964; Rikli, 1974) has indicated opposite sex or male experimenters elicit better performance on certain types of tasks. Other studies indicate no differences or differences only with certain age groups of subjects. However, the tradition of athletics as a male domain, and the findings of some studies involving physical activity where male investigators elicited greater responses in female subjects suggest that male coaches of female teams may be more effective.

In summary, this investigation was designed to examine the following hypotheses:

Leader Style.

- 1) Male coaches are more task-oriented than female coaches.
- 2) Female coaches are more relations-oriented than male coaches.

Leader Behaviors.

- 1) Male coaches use more structuring behaviors than female coaches.
- 2) Male coaches use more production emphasis behaviors than female coaches.
- 3) Male coaches use fewer consideration behaviors than female coaches.

Coach Effectiveness.

- 1) Female teams coached by males are more effective than female teams coached by females.

Procedures

The sample for this study included the coaches of 89 varsity basketball teams representing the high schools in two large suburban school districts in the mid-Atlantic area of the country. Forty-four of the teams were boys' teams coached by males, and 45 teams were girls' teams. Twenty-six of the coaches of the female teams were female and 19 were male. All of the coaches were teachers, and all but three taught in the school where he or she coached.

The data were collected through: 1) administration of two instruments, 2) a structured interview with each coach, and 3) published records of team performance. Data collected included measures of leader style (LPC Scale), leader behaviors (LBDQ-XII), seasonal won-lost record, and certain demographic information.

The LPC Scale was used to measure leader style. This instrument was developed by Fiedler (1967) and consists of an 18-item semantic-differential checklist. Each item was scored one to eight by the subject, providing a possible range of 18-144 as the leader style score. The higher the score, the more relations-

oriented the subject. Fiedler designated "high LPC" as greater than 73.8 and "low LPC" as less than 39.6. This has been a widely-used instrument due to ease of administration and interpretation. Fiedler reported high reliability and validity for the scale if used with experienced and mature leaders. The test-retest reliability in this study was .83 suggesting relative stability over the season of play. The fact that some researchers have questioned the instrument's reliability should be considered when interpreting the results or making predictions over greater periods of time.

Leader behaviors were measured by means of the Leader Behavior Description Questionnaire (LDBQ-XII). This questionnaire was the result of a body of research known as the Ohio State Leadership Studies (Stogdill, 1963) and is based on extensive factor analytic work and field testing. The complete instrument contains 12 subscales of which three were utilized in this study. Stogdill and his colleagues reported reliability coefficients for these three subscales ranging from .76 to .81. Each subscale was represented in the questionnaire by ten items. The subscales were initiation of structure, consideration, and production emphasis. Subjects assigned each item a score of 1-5, depending on the degree of agreement with the item which was felt by the

subject. This provided a possible range of 10-50 for each subscale. The wording of some items was changed slightly to make the terminology sport-specific; for example, performance was used instead of production. The test-retest reliability of the subjects' responses in this study was .91.

Permission to contact coaches was solicited from school system officials. Informed consent was solicited from coaches and players who participated in this investigation.

Each subject completed both scales prior to a pre-season interview. After the season the subjects completed the scales again, and 5-12 of the players from each team also completed the LDBQ-XII.

The interviews provided the coaches opportunities to classify their perceived leader style, preferred behaviors and discuss beliefs and expectations about sex differences in athletics, generally, and in their own coaching, specifically.

Results and Discussion

Leader Style.

The results of this investigation indicated significant differences in leader style of male and female coaches. However, the results were not in the predicted direction. Table 1 reports the mean, standard deviation and significance test for leader style.

Insert Table 1 about here

Male coaches of females ($\bar{x} = 77.79$) were significantly less task oriented than female coaches ($\bar{x} = 59.0$). Male coaches of males ($\bar{x} = 69.42$) were more task-oriented than males who coached females, but less so than females. However, the mean of 59.0 shown by female coaches is still above the "low" category (less than 39.6) designated by Fiedler, while the male score of 77.79 is in the "high" range (over 63.8) as described by Fiedler. Interestingly, the coaches' self-descriptions of leader style indicated that 27 of the 44 coaches of males considered themselves task-oriented, while 28 of the 45 coaches of females designated themselves as relations-oriented. Of those 28, 16 were female and 12 were male. Table 2 displays the self-report data in percentage form.

Insert Table 2 about here

These results do not support the conclusions of earlier researchers (Keane and Cheffers) who found no differences in leader style between male and female coaches. Further, role definitions for females which suggest that female leaders might

reflect the more nurturant, less dominant, less aggressive and more expressive characteristics traditionally attributed to women were not supported by the findings of this investigation. Rather these data may support some researchers who have found that successful female leaders and skilled athletes exhibit more characteristics commonly expected of males. These women have been reported to score higher in masculinity but not lower in femininity (Kanter 1975; Basow, 1980). These researchers further conclude that social-psychological gender should be regarded dualistically rather than as a bipolar phenomenon (Harris, 1980; Spence, Helmreich and Stagg, 1975). Since the primary role models for females who coach are male, and since perceptions about coaching are based on what male coaches demonstrate, it is reasonable to expect females to develop attitudes and approaches to coaching which are similar to males. Moreover, these female coaches may subconsciously emphasize what they imagine or perceive to be significant factors in effective coaching. Further, since women coaches are not the norm, they may reflect a specific, unique leader style. They may also feel a need to compensate for lack of experience in highly competitive situations by adopting a high task-orientation. This explanation may also be pertinent to the higher relations-orientations of males coaching girls. Males

may be reacting to social stereotypes of girls and women, expect less of them, focus on more general goals or lower levels of competition due to limited experiences coaching females. They may tend to coax rather than demand.

Finally, the leader style measure as developed by Fiedler did not address potential sex differences in responding to the instrument. Therefore, characteristically different response sets may suggest a cultural bias in the instrument rather than leader style differentiation. If differential socialization experiences have developed positive feelings in females toward nurturant, expressive, supportive, warm qualities, females might be expected to evaluate people more socially than in a task context. This would particularly influence the LPC style measure. This was further supported by the feeling expressed by several coaches that "girls won't play if they're mad at a teammate." Many coaches maintained that dealing with intra-team relationships was critical and continual with female teams.

Leader Behaviors.

The results regarding the leader behaviors are presented as a composite of the response of the coach and the mean of the responses of the team members of each coach. There was strong positive correlation of the coach score to the player score on

each leader behavior subscale. Table 3 gives the mean and standard deviations for structuring, consideration, and production emphasis behaviors. Female coaches indicated more structuring behaviors ($\bar{x} = 45.15$) than males ($\bar{x} = 40.23$). Again, the hypothesized relationship was not supported relative to structuring; males did not structure more than females, but the predicted greater production emphasis scores were found in males.

Insert Table 3 about here

Consideration behaviors scores were significantly lower for all groups, but males coaching females showed the highest consideration scores ($\bar{x} = 41.21$), followed by female coaches ($\bar{x} = 37.04$) with male coaches of males showing the lowest score ($\bar{x} = 36.80$). The significant differences in behaviors scores of males coaching males and males coaching females suggests that leader behaviors are modified in response to group members (see Table 4).

Insert Table 4 about here

The differences between males and females relative to

structuring behaviors again may be a reflection of the experiential deficit of female athletes and coaches. Since until recently few females had extensive background participating, training, or coaching in highly organized, competitive athletics, female coaches may feel the need to emphasize organization (structuring) in their coaching behaviors. Males who coach females may perceive a similar need and adapt their behaviors. The greater experience in athletics of males may suggest less need for overt structuring of varsity athletes' activities. This very familiarity with practice regimens and training procedures may increase the need for motivating players to increase output and improve performance, hence the greater production emphasis score.

The greater consideration behaviors of male coaches of females suggests again that these coaches perceive a need to modify behaviors due to player characteristics, particularly sex. The coaches mentioned their concerns for the female players frequently during the interview in response to "Are there differences in coaching males and females?" "What?" and "Do you find you have to behave differently?" "How?" The males coaching females felt they had to be less demanding, more supportive, less critical of the players than if they had been male. They considered females to have a lower skill level, less drive to

excel, and to be easily distracted by other interests. Bartol (1978) has suggested that leader style and performance (behaviors) may be constant, but the experiences and actions of the followers are variable and that more research effort should be focused on the follower as the initiator or catalyst of leader behavior. These data suggest some differences in leader behaviors are influenced by followers. More investigation of the nature of the processes involved is warranted.

Coach Effectiveness.

No significant differences were found in career or seasonal winning percentages of male and female coaches among any of the three coach-player sex combinations (see Table 5). These findings suggest that while male and female coaches differed in some respects, these differences did not change effectiveness as measured by win-loss records.

Insert Table 5 about here

In fact, perhaps these differences are essential to assure maximum success of male or female leaders in specific situations, particularly in opposite-sex combinations of leader and followers. The sex of the followers may be a significant factor in determining

effective leader behaviors. Coaches may need to act in particular ways toward females to elicit the best performance, while these same behaviors are inappropriate when working with males; conversely, males may respond to certain leader behaviors that do not improve the performance of females. Research in learning style and hemisphericity differences of males and females may be pertinent.

The similarity in effectiveness is also noteworthy considering that the males coaching females had the least coaching-playing experience of any of the coaching groups. The awareness of what behaviors were effective apparently did not come from their previous experiences as players or coaches. Some of these men were seeking experience and hoping to coach what they considered a more challenging and competitive male team. Many relied on their vicarious impressions of the coaching role and their classroom teaching experiences to design their coaching strategies.

Multiple regression techniques were employed to determine the relationship between leader characteristics and the win-loss record of the teams in each coaching group. Table 6 reports the summary of the multiple regression analysis for each coaching group.

Insert Table 6 about here

Further analysis to identify the specific coach variables which explain variance in winning percentage indicated structuring and consideration¹ behaviors were the best predictors for female teams. These variables were not as good predictors for male teams. This finding supports the explanation of the data described earlier which suggested that male and female players elicit different coaching behaviors and expectations from their coaches. These data also indicated that leader style is not a strong predictor of coaching effectiveness. Possibly coaches may, if they do have a stable style, make behavior decisions which may be contrary to the characteristic leader style which they exhibit. This suggests that the leader style descriptor may not limit the range of behaviors a given leader may utilize in various situations enough for strong predictions.

This investigation provided limited support for a contingency model of leader effectiveness. Leaders in sport seem to vary their behaviors in response to perceived differential expectations of male and female athletes. They also use both consideration and structuring behaviors presumably according to situational factors

differently to develop effective (winning) teams. The operational definitions of leader characteristics may not have been adequate to fully explore the dimensions of leadership. For example, Fiedler's concept of leader style may be so general that a wide range of behaviors was possible within either orientation, task or relations. Similarly, the concepts of structuring, consideration, and production emphasis were derived from analysis of the repertoire of all leader behaviors. However, the critical factor in developing a leadership model is the decision-making process by which the leader (coach) selects the behavior to be used in a particular situation. The players respond to their perception of the coach's behavior. Coaches' behaviors or decisions about behaviors are responses to their perceptions of players.

Further research should focus on this decision-making process in coaches. The development and use of sport-specific instruments for assessing leader decision-making combined with use of direct observation of coach behaviors in a variety of situations is an important focus needed for more complete understanding of leadership processes in sport settings. Finally, leader characteristics of females coaching male players need to be examined to more fully explore the reciprocal influence of gender in coach-player interaction.

Reference Note.

1. Note that the subscales of production emphasis and structuring are very highly correlated, so only one was included in the regression analysis.

Table 1

Comparison of Leader Style Scores

Coach Sex/Player Sex	Mean	S. D.
Male/Female	77.79	16.83
Female/Male	59.00	16.27
Male/Male	69.42	15.53
Male/Male and Female	72.94	17.82
All contrasts significant beyond the .05 level	$p \geq .05$	

Table 2
Coach Designation of Personal Leader Style

	Task-Oriented	Relations-Oriented
Male/Male	27	17
N = 44	61.8%	38.2%
Female/Female	10	16
	38.5%	61.5%
Male/Female	7	12
	36.8%	63.2%
Male-Female/Female	17	28
	37.8%	62.2%

Table 3
Means and Standard Deviations for Leader Behaviors
by Coach Sex and Team Sex

Leader Behaviors	Female-Female		Male-Female		Male-Male	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Structure	45.15	3.40	44.32	3.51	42.64	3.73
Consideration	37.04	2.86	41.21	5.07	36.80	3.65
Production Emphasis	40.23	4.43	39.11	4.01	40.86	3.10

Table 4
Contrasts^a of Leader Behavior Composite Scores

	Structure	Consideration	Production Emphasis
All men to all women	-1.95 ^h	2.16 ^g	1.45
Fem/Fem to Male/Fem ^b	- .77	3.64 ^g	-1.00
Male/Fem to Male/Male ^c	-1.70	-4.23 ^g	4.70 ^f
Male/Male to Fem/Fem ^d	-2.83 ^g	- .26	4.04 ^f
Male/Male to Fem/Fem ^e and Male/Fem	-2.85 ^g	-2.33 ^g	5.31 ^f

a t-values given for each contrast

b female coaches to male coaches of females

c male coaches of females to male coaches of males

d male coaches of males to female coaches

e coaches of male teams to coaches of female teams

f $p \leq .001$

g $p \leq .01$

h $p \leq .05$

Table 5
Means and Standard Deviations
for Coaching Success

Coaches/Players	Seasonal Winning Percentage ^a		Career Winning Percentage	
	Mean ^b	S.D.	Mean	S.D.
All (N=89)	.510	.227	.612	.156
Female/Female (N=26)	.474	.229	.598	.196
Male/Male (N=44)	.519	.221	.612	.127
Male/Female (N=19)	.537	.242	.631	.182

^a percentage of regular season games won

^b no significant differences among means

Table 6
Multiple Regression of Leader Characteristics
as Predictors of Seasonal Winning Percentage
Among Coaches

Coach/Player	N	Multiple R	R Square	F
All	89	.496	.246	3.58 ^a
Male/Male	44	.544	.296	2.85
Female/Female	26	.756	.572	8.69 ^a
Male/Female	19	.827	.684	4.34 ^a

^a $p \geq .05$

References

- Bardwick, Judith. Psychology of Women: A Study of Bio-Cultural Conflicts. New York: Harper & Row, 1971.
- Bartol, Kathryn. "The sex structuring of organizations. A search for possible causes," Academy of Management Review, 3, 805-815, 1978.
- Basow, Susan. Sex Role Stereotypes: Traditions and Alternatives. Monterey, California: Brooks/Cole, 1981.
- Bird, Anne Marie. "Development of a model for predicting team performance," Research Quarterly, 48, 24-32, 1977.
- Chapman, J. Brad. "Comparisons of male and female leadership style," Academy of Management Journal, 18, 645-650, 1975.
- Fiedler, Fred E. A Theory of Leadership Effectiveness. New York: McGraw-Hill, 1967.
- Fiedler, Fred E. "Personality and situational determinants of leader behavior," in E.A. Fleischman and J.G. Hunt (eds.), Current Developments in the Study of Leadership. Carbondale, Illinois: Southern Illinois University Press, 1973.
- Halpin, Andrew W. Manual for the Leader Behavior Description Questionnaire. Columbus, Ohio: Ohio State University, 1957.
- House, Robert J. "A path-goal theory of leader effectiveness," Administrative Science Quarterly, 16, 321-338, 1971.

Coach Comparisons

- Kanter, Rosabeth Moss. "Women and the structure of organizations," in Marcia Millman and Rosabeth Kanter (eds.), Another Voice. Garden City, New York: Doubleday, 1975, pp. 34-75.
- Keane, Frank, and John Cheffers. "The relationship of sex, leader behavior, leadership style and coach player interaction." Paper presented at the American Alliance of Health, Physical Education, and Recreation National Convention, 1978.
- Maccoby, E., and Carol Nagy Jacklin. The Psychology of Sex Differences. Stanford, California: Stanford University Press, 1974.
- Rikli, Roberta. "Effects of experimenter expectancy set and experimenter sex upon grip strength and hand steadiness scores," Research Quarterly, 45, 416-423, 1974.
- Rosenthal, R. Experimenter Effects in Behavioral Research. New York: Appleton-Century Crafts, 1966.
- Schein, Virginia. "Relationship between sex role stereotype and requisite management characteristics," Journal of Applied Psychology, 57, 95-100, 1973.
- Singer, Robert N., and Jack N. Llewellyn. "Effects of experimenter's gender on subject's performance," Research Quarterly, 44, 185-191, May 1973.

Coach Comparisons

- Spence, J. T., R.L. Helmreich, and J. Stapp. "Ratings of self and peers on sex role attributes and their relation to self-esteem and conception of masculinity and femininity," Journal of Personality and Social Psychology, 32, 29-39, 1975.
- Stevenson, H.W. "Adult performance as a function of sex of experimenter and sex of subject," Journal of Abnormal and Social Psychology, 68, 214-216, 1964.
- Stogdill, Ralph M. Manual for the Leader Behavior Description Questionnaire--Form XII. Columbus, Ohio: Bureau of Business Research, 1963.
- Tharp, R.G. and R. Gallimore. "What a coach can teach a teacher," Psychology Today, 9, 75-78, Jan. 1976.
- VanderVelden, Lee. "Relationships among member, team and situational variables and basketball team success: A social-psychological inquiry." Unpublished Doctor's dissertation, University of Wisconsin, 1971.
- Walum, Laurel Richardson. The Dynamics of Sex and Gender: A Sociological Perspective. Chicago, Illinois: Rand McNally College Publishing Company, 1977.